



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

STATIONARY SOURCE COMPLIANCE DIVISION

APPLICATION PROCESSING AND CALCULATIONS

Pages
16Page
1Appl. No.
513832Date
11/17/10Processed
By Rafik
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By**PERMIT TO CONSTRUCT
PERMIT TO OPERATE**

COMPANY NAME: BP WEST COAST PRODUCTS LLC - Facility ID: 131003

MAILING ADDRESS: P.O. BOX 6210
CARSON, CA 90749-6210EQUIPMENT ADDRESS: 2350 E. 223rd Street
CARSON, CA 90810

PROCESS 16: PETROLEUM STORAGE TANKS					
SYSTEM 2: FLOATING ROOF TANKS					S13.3
Equipment	ID NO.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
STORAGE TANK, INTERNAL FLOATING ROOF, NO. 14, GASOLINE, SOUR NAPHTHA, ISOOCTANE, ALKYLATE, & TOLUENE, GAS OIL, UNTREATED WASTEWATER , 360000 BBL, DIAMETER: 200 FT, HEIGHT: 64 FT, WITH A/N 414400 513832 FLOATING ROOF, PONTOON, WELDED SHELL PRIMARY SEAL, CATEGORY A, METALLIC SHOE SECONDARY SEAL, CATEGORY A, RIM MOUNTED GUIDEPOLE, SLOTTED, WITH GASKETED SLIDING COVER, POLE SLEEVE AND POLE WIPER	D1150			HAP: (10) [40CFR 63 Subpart CC, #3A, 6-23-2003]; BENZENE: (10) [40CFR61 SubpartFF_02, 12-4,2003]	C1.10, C6.1, E71.16, E193.10, H23.12 , H23.25



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

STATIONARY SOURCE COMPLIANCE DIVISION

APPLICATION PROCESSING AND CALCULATIONS

Pages
16

Page
2

Appl. No.
513832

Date
11/17/10

Processed
By Rafik
Beshai

Checked
By

BACKGROUND

On August 16, 2010 BP West Coast Products LLC (BP) submitted A/Ns 513831 and 513832 to the District for modification of Tank No. 14 (Device ID: D1150) at the BP Carson Refinery (Facility ID: 131003). The tank is being modified to allow storage of either Gas Oil or Untreated Wastewater, in addition to the currently permitted commodities (gasoline, sour naphtha, iso-octane, alkylate, and toluene). A/N 513831 addresses the amendment of the Title V permit. The initial Title V permit was issued to this facility on September 1, 2009. A/N 513832 addresses modification of Tank No. 14. The project involves permitting the storage of Gas Oil or Untreated Wastewater in Tank No. 14, as well as minor modification of piping/fugitive components to accommodate the transfer of these materials. Tank No. 14 is listed under Process 16: Petroleum Storage Tanks, System 2: Floating Roof Tanks in the Title V permit. BP proposes to implement the changes associated with this application in late 2010 or early 2011 and thus seeks issuance of a permit by December 1, 2010.

In addition to the permitting of storage of other materials in Tank No. 14, three permit changes are implemented administratively by the District, under this evaluation. These are described below:

- Condition C1.10 is amended to state requirements for tank roof/level measurements. The condition is amended to be consistent with other throughput conditions in the permit. The amended condition requires the tank roof/level movement be measured with an Automatic Tank Level Gauge (ATLG). The function of the ATLG is required to be verified quarterly by comparison to manual tank level measurements. In the event of failure, the ATLG is required to be repaired and put back into service within 10 days of removal from service.
- Condition E193.10 is amended, by elimination of the requirement that the tank not have a guidepole. Tank No. 14 does have a pipe, which serves as an anti-rotational device (i.e. as a guidepole). Guidepoles are commonly found in floating roof tanks, to prevent the floating roof from rotating and to help maintain floating roof seal clearances. Attachment #7 is a request from BP to amend condition E193.10, by eliminating the requirement that the tank contain no guidepoles. The tank was originally equipped with a ladder/gauge well system. The ladder portion of this system was removed under A/N 404396. This upgrade was made to bring the tank in compliance with District Rule 1178. As shown in drawings in Attachment #7, the ladder was removed and the gauge pipe remained and was fitted with a gasketed cover, pile wiper, and pole sleeve. Further, the 2008 Rule 463/1178 Compliance Report shows that the tank is equipped with an antirotational device.
- The guidepole (described above) is listed in the equipment description of the tank.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT****STATIONARY SOURCE COMPLIANCE DIVISION****APPLICATION PROCESSING AND CALCULATIONS**Pages
16Page
3Appl. No.
513832Date
11/17/10Processed
By Rafik
BeshaiChecked
By

The permit history of the tank is described in the table below.

Permit History

A/N	Tank No.	Previous P/O	Date	Permit History
513832	14	F77590/414400 F59387/404693 F49942/395504 D62179/265917	8/30/2005 3/21/2003 3/12/2002 9/17/1992	<p>Tank No. 14 is currently permitted under Permit No. F77590 (A/N 414400), issued on August 30, 2005. This application involved an administrative change to the permit. Under this application the tank height was amended from 60 feet to 64 feet and the tank capacity was amended from 358,000 bbl to 360,000 bbl. No ROG emissions were not entered in the District's New Source Review (NSR) records under this application. However, a ROG emissions rate of 2.18 lbs/hr was entered in the AEIS data sheet (for both uncontrolled and controlled emissions).</p> <p>Previously, Tank No. 14 was permitted under Permit No F59387 (A/N 404693), issued on March 21, 2003. Under this application the tank service was changed, to permit storage of gasoline, sour naphtha, iso-octane, alkylate and toluene. Further, the tank throughput was amended to 7.3E+6 bbl/yr. Under this application a ROG emissions rate of 10 lbs/day – 30 day average was entered in NSR records (uncontrolled emissions = 1.97 lbs ROG/hr; controlled emissions = 0.4 lbs ROG/hr).</p> <p>Previously, Tank No. 14 was permitted under Permit No. F49942 (A/N 395504), issued on March 12, 2002. This application was processed for Change of Ownership of the tank, from ARCO Products Co. to BP West Coast Products LLC.</p> <p>Previously, Tank No. 14 was permitted under Permit No. D62179 (A/N 265917), issued on September 17, 1992. Under this application, the tank was constructed and the first Permit to Operate was issued.</p>

A review of District records for the past three years indicates that there have been no Notices of Violation (NOV) or Notices to Comply (NTC) issued for Tank No. 14.

PROCESS DESCRIPTION

Tank No. 14 is an internal floating roof storage tank, with a capacity of 360,000 barrels. It has a diameter of 200 feet and shell height of 64 feet. The shell sections are welded (i.e. not riveted). It is equipped with a pontoon type floating roof, with a mechanical shoe primary



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

STATIONARY SOURCE COMPLIANCE DIVISION

APPLICATION PROCESSING AND CALCULATIONS

Pages
16

Page
4

Appl. No.
513832

Date
11/17/10

Processed
By Rafik
Beshai

Checked
By

seal (Category A under District Rule 463) and rim mounted secondary seal (Category A). The secondary seal is a Flex-A-Seal which the District has determined meets standards of Category A seals, under Rule 463 (see Attachment #6 for the District's determination that this secondary seal is classified as a Category A seal). The tank roof is self supported (i.e. there are no roof support columns inside the tank). Currently, permit condition C1.10 limits tank throughput to 608,000 barrels per month. This is equivalent to 20.27 tank turnovers per year. The tank is currently limited to the storage of the following materials: gasoline, sour naphtha, iso-octane, alkylate, and toluene. The Rule 463/1178 Compliance Report, dated July 13, 2010, indicates that Gasoline was stored in the tank. The tank is unheated; however, Gas Oil will enter the tank at an elevated temperature of approximately 90°F. The floating roof appurtenances are described in the table below.

Tank No. 14 Floating Roof Deck Fittings

Quantity	Description
2	Access Hatch (24" Diameter Well); Bolted Cover, Gasketed
1	Guide Pole/Sample Well; Gasketed Sliding Cover, w/Float, Wiper
1	Automatic Gauge Float Well (20" Diameter Well); Bolted Cover, Gasketed
3	Vacuum Breaker (10" Diameter Well); Weighted Mechanical Actuation, Gasketed
38	Roof Leg (3" Diameter Leg); Adjustable, Pontoon Area, Sock
75	Roof Leg (3" Diameter Leg); Adjustable, Center Area, Sock
1	Rim Vent (6" Diameter); Weighted Mechanical Actuation, Gasketed

The tank was installed in 1992, for the purpose of storing Methyl Tertiary Butyl Ether (MTBE). Originally, the tank was permitted for a throughput of 5.475E+6 bbl/yr. However, blending of MTBE with gasoline was phased out under the CARB Phase III Reformulated Fuel Gas (RFG) project.

The Material Safety Data Sheet (MSDS) for Gas Oil – Attachment #3 – indicates that it is a C13 to C45 hydrocarbon liquid, which contains approximately 1.2 wt% sulfur. It can contain hydrogen sulfide, but the expected concentration of hydrogen sulfide is not stated in the Composition & Exposure Limits section of the MSDS. The MSDS indicates that Gas Oil contains 0.2% phenanthrene and 3 to 7% of a mixture of Polycyclic Aromatic Hydrocarbons (PAH)s. It has a vapor pressure of <0.01 psia at 100°F. It has a flash point of 220°F. Gas Oil has a lower explosion limit of 0.5% and an upper explosion limit of 5%.

The MSDS for Waste Water Streams – Attachment #3 – indicates that it contains 0 to 2% sodium hydroxide, 0 to 2% spent caustic and 95 – 99% water. It is not considered as a present risk of explosion.

EMISSIONS

The storage of Gas Oil or Untreated Wastewater in Tank No. 14 will not result in an increase in criteria pollutant emissions. The pre-modification potential-to-emit of VOC has been calculated and is based on storage of a product with a True Vapor Pressure (TVP) of



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

STATIONARY SOURCE COMPLIANCE DIVISION

APPLICATION PROCESSING AND CALCULATIONS

Pages
16

Page
5

Appl. No.
513832

Date
11/17/10

Processed
By Rafik
Beshai

Checked
By

11 psia under storage conditions (as limited in condition E71.16) and the maximum throughput of 608,000 bbl/month (306,432,000 gal/yr). Attachment #1 is the output of the Tanks 4.09d program for this case. For the pre-modification case, annual VOC emissions of 5,403 lbs are calculated. This case is similar to the storage of Sour Naphtha, which the MSDS indicates has a vapor pressure of approximately 6 to 15 psia at 100°F. This is compared to the potential-to-emit for three post-modification cases: 1) storage of Gas Oil, 2) storage of Untreated Wastewater, 3) storage of product with TVP of 11 psia. Attachment #2 has the Tanks 4.09d program output for the first two cases; the third post-modification case is identical to the pre-modification case. For the post-modification cases, annual VOC emissions of 400 lbs (storage of Gas Oil), 851 lbs (storage of Untreated Wastewater), and 5,403 lbs (TVP 11 psia material) are calculated. Thus, the storage of Gas Oil or Untreated Wastewater in Tank No. 14 is expected to result in a reduction in VOC emissions, relative to the emissions rates resulting from storage of currently permitted commodities.

Tank No. 14 Potential-to-Emit of VOC

	Pre-Modification Potential-to-Emit (Maximum Case)	Post-Modification Potential-to-Emit (Case 1 - Gas Oil)	Post-Modification Potential-to-Emit (Case 2 - Untreated Wastewater)	Post-Modification Potential-to-Emit (Maximum Case)	Change in Emissions (Case 1)	Change in Emissions (Case 2)	Change in Emissions (Maximum Case)
Tank No. 14	5,403 lbs/yr	400 lbs/yr	851 lbs/yr	5,403 lbs/yr	-5,003 lbs/yr	-4,551 lbs/yr	0 lbs/yr
	14.80 lbs/day	1.10 lbs/day	2.33 lbs/day	14.80 lbs/day	-13.71 lbs/day	-12.47 lbs/day	0 lbs/day
	15 lbs/day (30 day average)	1 lbs/day (30 day average)	2 lbs/day (30 day average)	15 lbs/day (30 day average)	-14 lbs/day (30 day average)	-13 lbs/day (30 day average)	0 lbs/day (30 day average)
	0.62 lbs/hr	0.05 lbs/hr	0.10 lbs/hr	0.62 lbs/hr	-0.57 lbs/hr	-0.52 lbs/hr	0 lbs/hr

In order to store Gas Oil and Untreated Wastewater, modification of piping is required. This involves addition of fugitive components and results in an emissions increase, as shown in the table below.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

STATIONARY SOURCE COMPLIANCE DIVISION

APPLICATION PROCESSING AND CALCULATIONS

Pages
16Page
6Appl. No.
513832Date
11/17/10Processed
By Rafik
BeshaiChecked
By**VOC Emissions from Piping Modifications**

Component Type		Service	Number of Components Added	Emission Factor (lb/yr/component)	Annual VOC Emissions Increase (lbs/yr)
Valves	Sealed Bellows	Gas/Vapor and Light Liquid	0	0	0
	AQMD Approved I&M Program	Fuel & Natural Gas	0	12	0
		Gas Vapor	0	23	0
		Light Liquid	1	19	19
		Heavy Liquid	4	3	12
Pumps	Sealless Type	Light Liquid	0	0	0
	Double Mechanical Seals or Equivalent	Light Liquid	0	104	0
	Single Mechanical Seal	Heavy Liquid	0	80	0
Compressor		Gas/Vapor	0	514	0
Flanges		All	10	1.5	15
Pressure Relief Valves		All	0	0	0
Process Drains		All	0	80	0
Total lbs/year:					46
Total lbs/day:					0.13
Total lbs/day – 30 day average:					0
Total lbs/hr:					0.005

The project, for permitting storage of Gas Oil or Untreated Wastewater, will not result in an increase in Toxic Air Contaminant (TAC) emissions from Tank No. 14. Emissions of TACs from Tank No. 14, resulting from storage of currently permitted commodities as evaluated under A/N 404693 (specifically Sour Naphtha), are shown below. For these emissions rates, a Tier II Screening Health Risk Assessment (HRA) determined that the increase in MICR for offsite worker and residential receptors would be less than one in a million and chronic hazard indices would be less than 1.0.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

STATIONARY SOURCE COMPLIANCE DIVISION

APPLICATION PROCESSING AND CALCULATIONS

Pages
16

Page
7

Appl. No.
513832

Date
11/17/10

Processed
By Rafik
Beshai

Checked
By

TAC Emissions From Tank No. 14, Evaluated Under A/N 404693 (Sour Naphtha)

Pollutant	Emissions Rates
Benzene	2.95E-3 lbs/hr 25.80 lbs/yr 1.29E-2 tons/yr
Ethylbenzene	7.72E-4 lbs/hr 6.76 lbs/yr 3.38E-3 tons/yr
Hexane (n)	2.72E-2 lbs/hr 238.00 lbs/yr 1.19E-1 tons/yr
Hydrogen Sulfide	3.15E-3 lbs/hr 27.6 lbs/yr 1.38E-2 tons/yr
Toluene	2.95E-3 lbs/hr 25.80 lbs/yr 1.29E-2 tons/yr
Xylene(m)	1.99E-3 lbs/hr 17.42 lbs/yr 8.71E-3 tons/yr

Emissions of TACs from Tank No. 14, from the storage of Gas Oil or Untreated Wastewater, have been quantified. The are listed in the tables, below.

TAC Emissions Rates from Storage of Untreated Wastewater in Tank No. 14

Pollutant	Emissions Rates
Benzene	9.14E-4 lbs/hr 8.01 lbs/yr
Ethylbenzene	2.31E-4 lbs/hr 2.02 lbs/yr
Hexane (n)	2.66E-3 lbs/hr 23.27 lbs/yr
Naphthalene	4.57E-6 lbs/hr 0.04 lbs/yr
Toluene	7.45E-4 lbs/hr 6.53 lbs/yr
Xylene	8.52E-4 lbs/hr 7.46 lbs/yr

Notes: Weight % of TACs in wastewater are from the evaluation under A/N 448851, under which Tank No. 21 (also in untreated wastewater service) was permitted.

Tanks 4.09d output for post-modification case, storage of Untreated Wastewater with TAC Speciation, is also found in Attachment #2.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

STATIONARY SOURCE COMPLIANCE DIVISION

APPLICATION PROCESSING AND CALCULATIONS

Pages
16

Page
8

Appl. No.
513832

Date
11/17/10

Processed
By Rafik
Beshai

Checked
By

TAC Emissions Rates from Storage of Gas Oil in Tank No. 14

Pollutant	Emissions Rates
Cresols (mixed isomers)	2.28E-6 lbs/hr 0.02 lbs/yr

Notes: Tanks 4.09d output for post-modification case, storage of Gas Oil with TAC Speciation, is also found in Attachment #2.

Emissions of TACs from leakage of fugitive components are assumed to be negligible.

Attachment #4 contains Tier I and Tier II Screening Health Risk Assessments (HRA)s for storage of Gas Oil or Untreated Wastewater in Tank No. 14. These assessments make use of the TAC emissions rates stated above. The assessments also make use of the distance of Tank No. 14 to the fenceline (i.e. nearest offsite worker receptor) of 92 meters and distance to the nearest residence of 475 meters.

RULE EVALUATION

California Environmental Quality Act (CEQA)

The CEQA Applicability Form (400-CEQA) submitted by the applicant indicates that the project does not have any impacts which trigger the preparation of a CEQA document. The expected impacts of the project on the environment are not significant, therefore preparation of an Environmental Impact Report (EIR) is not required.

Rule 212 – Standards for Approving Permits

This rule requires public noticing for a modification or a new source located within 1000 feet of a school, if exposure to TACs associated with the project results in a Maximum Individual Cancer Risk (MICR) of 1×10^{-6} or greater during a lifetime (70 years), or if the project results in an emissions increase exceeding limits stated in Rule 212(g). There are no schools within 1000 feet of Tank No. 14, the TACs emitted from the tank during storage of Gas Oil or Untreated Wastewater will not result in an increase in MICR exceeding 1×10^{-6} (see Attachment #4 for screening HRAs), and the project does not result in an increase in criteria pollutant emissions. Therefore, public notice will not be required and compliance with Rule 212 is assured.

Rule 402 - Nuisance

With proper operation and maintenance, Tank No. 14 is not expected to be a source of nuisance problems.

Rule 463 – Storage of Organic Liquids

This rule requires that an above ground tank with a capacity greater than 39,630 gallons, which is used to store organic liquids with a true vapor pressure of 0.5 psia



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

STATIONARY SOURCE COMPLIANCE DIVISION

APPLICATION PROCESSING AND CALCULATIONS

Pages
16

Page
9

Appl. No.
513832

Date
11/17/10

Processed
By Rafik
Beshai

Checked
By

or greater under actual storage conditions, have one of the following vapor control devices: external floating roof, fixed roof with an internal floating cover, or a fixed roof connected to a vapor recovery system. The internal floating cover is required to have a closure device consisting of either a liquid mounted primary seal or a primary and secondary seal. All openings and fittings are required to be fully gasketed and controlled. The floating roof seals used must be from a list of approved seals or otherwise must be approved by the Executive Officer. The concentration of organic vapors above the floating roof must not exceed 30% of its Lower Explosive Limit (LEL). Other requirements include that the materials stored in the tank not have a true vapor pressure exceeding 11 psia under actual storage conditions and that the floating cover must float on the surface of the liquid at all times except for cleaning or repair. Tank No. 14 has an internal floating roof which is equipped with primary and secondary seals, meeting the specifications of this rule, and stores materials with vapor pressure not exceeding 11 psia under actual storage conditions. It is currently in compliance with Rule 463. Continued compliance with the requirements of this rule is expected.

Reg. IX - New Source Performance Standards

Since the project does not result in an increase in criteria pollutant emissions it does not meet the definition of "modification" under 40 CFR 60.14. Thus, the tank is not subject to any additional New Source Performance Standards (NSPS) under 40 CFR 60.

Since Tank No. 14 was constructed after July 23, 1984, it is subject to the requirements of 40 CFR 60 Subpart Kb. 40 CFR 60 Subpart Kb requires that tanks which store volatile organic liquids, which have a capacity greater than 151 cubic meters (39,900 gallons) and store material with a true vapor pressure greater than 5.2 kPa (0.75 psia) but less than 76.6 kPa (11.1 psia), be equipped with either a fixed roof with an internal floating roof, external floating roof, closed vent system and control device, or equivalent system. The internal floating roof is required to float on the liquid level at all times, except during initial fill and when the tank is being completely emptied, or emptied and refilled. When the roof is resting on its leg supports, the process of filling, emptying or refilling shall be continuous and shall be accomplished as rapidly as possible. The internal floating roof shall be equipped with one of the following closure devices: a mechanical shoe seal, two seals mounted one above the other (the lower seal may be vapor mounted), or a foam or liquid mounted seal in contact with the liquid. Each opening in the internal floating roof (except automatic bleeder vents or rim space vents) is to provide a projection below the liquid surface. Each opening (except leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sampling wells and stub drains) shall be equipped with a cover which is to remain closed except when in use. The cover or



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

STATIONARY SOURCE COMPLIANCE DIVISION

APPLICATION PROCESSING AND CALCULATIONS

Pages
16

Page
10

Appl. No.
513832

Date
11/17/10

Processed
By Rafik
Beshai

Checked
By

lid shall be gasketed. Covers for access hatch and automatic gauge float well shall be bolted, except for when in use. Automatic bleeder vents are to be equipped with a gasket and are to remain closed except when the roof is being floated off or landed on its leg supports. Rim space vents are to be equipped with a gasket and are to open only when the roof is not floating. Sample wells are to have a slit fabric cover which covers at least 90% of the opening. Roof penetrations for support columns are to be equipped with a flexible fabric sleeve seal or a gasketed sliding cover. Roof penetrations for a ladder shall be equipped with a gasketed sliding cover. Tank No. 14 currently meets these requirements. Continued compliance with these requirements is expected.

Permit condition H23.3, applied to device D2590 – Fugitive Emissions, Miscellaneous under Process 16, System 2, requires fugitive VOC components in this system to meet standards promulgated under 40 CFR 60 Subpart GGG. The BP Carson Refinery has applied the standards under this regulation on a facility-wide basis. This regulation requires that fugitive components meet standards stated in Sections 60.482-1 through 60.482-10, as soon as practicable, or within 180 days of equipment startup. Compliance with these standards, for new and existing fugitive components, is expected. Since fugitive VOC components in Process 16, System 2 are subject to the 40 CFR 60 Subpart GGG, they are exempt from the standards under 40 CFR 60 Subpart GGGa.

Rule 1149 – Storage Tank Degassing

This rule has requirements for tank cleaning and degassing operations. Emissions from above ground tanks are required to be controlled by one of the following methods: liquid balance, negative pressure displacement and subsequent incineration, vapor condensation with a refrigeration system, or any other method which controls VOC by at least 90%. Continued compliance with the requirements of this rule during tank cleaning and degassing is expected.

Rule 1173 – Fugitive Emissions of Volatile Organic Compounds

This rule specifies leak control, identification, operation, inspection, maintenance, and recordkeeping requirements for all VOC components. New fugitive components associated with this project will be incorporated into the refinery's existing inspection and monitoring program. Continued compliance with this rule is expected.

Rule 1176 – VOC Emissions from Wastewater Systems

Per 1176(i)(5)(E), tanks which are subject to the requirements of Rule 463, are not subject to the requirements of Rule 1176. Since Tank No. 14 is subject to requirements of Rule 463, it is not subject to the requirements of this rule.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

STATIONARY SOURCE COMPLIANCE DIVISION

APPLICATION PROCESSING AND CALCULATIONS

Pages
16

Page
11

Appl. No.
513832

Date
11/17/10

Processed
By Rafik
Beshai

Checked
By

Rule 1178 – VOC Emissions from Storage Tanks at Petroleum Facility

This rule applies to storage tanks with a capacity of 19,815 gallons or greater, used to store materials with a true vapor pressure greater than of 0.1 psia, which are located at facilities which had VOC emissions exceeding 20 tons in their Annual Emissions Report (AER) for any year starting with 2000. Tank No. 14 is subject to the requirements of this rule. For internal floating roof tanks, requirements include: that fixed roof support columns and wells be equipped with gasketed sliding covers or flexible fabric sleeves, that ladder wells be equipped with gaskets and remain closed except when access is needed, other roof openings be equipped and maintained according to (d)(1)(A) or (d)(1)(C), that rim seals include either a primary seal or a primary and secondary seals meeting specification of (d)(1)(B), and that the concentration of organic vapor in the space above the floating roof not exceed 50% of its LEL for tanks installed prior to 1984, or 30% of its LEL for tanks installed after 1984. Tank No. 14 currently meets these requirements. Continued compliance with these standards is expected.

Reg. XIII - New Source Review:


This rule states requirements, including the use of Best Available Control Technology (BACT), providing emissions offsets for increases in non-attainment air contaminant emissions, and performing air quality modeling to assess the impact of the project on ambient air quality. Since the project does not result in an increase in criteria pollutant emissions, Reg XIII requirements of BACT, emissions offsets, and air quality modeling do not apply.

Rule 1401 – New Source Review of Carcinogenic Air Contaminants

This rule has requirements that any new construction or modification not result in an increase in Maximum Individual Cancer Risk (MICR) exceeding 1×10^{-6} if T-BACT is not used, or 10×10^{-6} if T-BACT is applied, that chronic and acute hazard indices not exceed 1.0, and that the cancer burden not exceed 0.5. The Tier I and Tier II Screening Health Risk Assessments (Attachment #4), which make use TACs emissions rates expected from storage of Gas Oil or Untreated Wastewater, indicate that the increase in MICR will be under 1×10^{-6} and that hazard indices will be less than 1.0. These assessments indicate that Tank No. 14 will operate in compliance with this rule.

Reg XVII – Prevention of Significant Deterioration

This rule applies to emissions of pollutants from a facility for which attainment of ambient air quality standards has been achieved in the South Coast Air Basin (i.e. NO₂, SO₂, CO and lead). Tank No. 14 does not emit these pollutants and therefore this regulation does not apply to this project.

 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT STATIONARY SOURCE COMPLIANCE DIVISION APPLICATION PROCESSING AND CALCULATIONS	Pages 16	Page 12
	Appl. No. 513832	Date 11/17/10
	Processed By Rafik Beshai	Checked By

Reg. XXX - TV Operating Permits

This facility is subject to Reg. XXX and an initial Title V permit was issued on September 1, 2009. Since Tank No. 14 will be subject to requirements of 40 CFR 61 Subpart FF, when storing Wastewater, the project involves a Significant Permit Revision of the Title V permit (as defined under Rule 3000). As such, the project is required to undergo EPA review (45 day review and comment period) and is subject to Public Notice requirements under Rule 3006.

Rule 3006 addresses public notice requirements. It requires that a public notice be published in a newspaper serving the county where the source is located, or that a notice be sent by mail to those who request in writing to be on a list, and any other means as determined by the Executive Officer to ensure adequate notice to the affected public. This rule requires that the notice contain the following:

- i) The identity and location of the affected facility;
- ii) The name and mailing address of the facility's contact person;
- iii) The identity and address of the South Coast Air Quality Management District as the permitting authority processing the permit;
- iv) The activity or activities involved in the permit action;
- v) The emissions change involved in any permit revision;
- vi) The name, address, and telephone number of a person whom interested persons may contact to review additional information including copies of the proposed permit, the application, all relevant supporting materials, including compliance documents as defined in paragraph (b)(5) of Rule 3000, and all other materials available to the Executive Officer which are relevant to the permit decision;
- vii) A brief description of the public comment procedure; and,
- viii) The time and place of any proposed permit hearing which may be held, or a statement of the procedure to request a proposed permit hearing if one has not already been requested.

The SCAQMD plans to meet all public notice and EPA review and comment requirements for this project. Compliance with this regulation is expected.

40 CFR 61, Subpart FF

Since Tank No. 14 may be put into Untreated Wastewater service it will be subject to the requirements of this regulation. This regulation contains standards for waste management units processing benzene waste. Under 61.351, alternate standards for tanks are stated. Under this section, a fixed roof tank with a floating roof is required meet standards under 40 CFR 60.112b(a)(1). These are the standards under 40 CFR 60 Subpart Kb, with which Tank No. 14 is already in compliance. Continued compliance is expected.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

STATIONARY SOURCE COMPLIANCE DIVISION

APPLICATION PROCESSING AND CALCULATIONS

Pages
16

Page
13

Appl. No.
513832

Date
11/17/10

Processed
By Rafik
Beshai

Checked
By

40 CFR 63, Subpart CC

As specified in the Emissions and Requirements Section of the Facility Permit, Tank No. 14 is subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Petroleum Refineries, as stated in 40 CFR 63 Subpart CC. Permit condition H23.25 also cites applicability of this regulation. Under this regulation, Tank No. 14 is considered a Group 1 Storage Vessel. Per 63.640(n), Group 1 Storage Vessels which are part of an existing source and also subject to the provisions of 40 CFR 60 Subpart Kb, shall only comply with the requirements of 40 CFR 60 Subpart Kb (except as provided in section (n)(8) of this section). Tank No. 14 will continue to be in compliance with the requirements of 40 CFR 60 Subpart Kb and thus will continue to be in compliance with 40 CFR 63 Subpart CC.

RECOMMENDATION:

Issue the Permit to Construct and Permit to Operate with the following conditions:

S13.3 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	463
VOC	District Rule	1149
VOC	District Rule	1178

[RULE 1149, 5-2-2008; **RULE 1178, 4-7-2006; RULE 463, 5-6-2005]**

[System subject to this condition: Process 16, System 2]

C1.10 The operator shall limit the throughput to no more than 6.08e+05 barrel(s) in any one calendar month.

~~The operator shall install and maintain a gauging system to continuously monitor and record the liquid level in this tank.~~

The operator shall calculate the throughput, in barrels, by the following equation: $0.14 \times D \times D \times H$, where D is the diameter of the tank in feet based on the tank strapping chart and H is the total vertical one-way roof travel in feet per month. ~~Records of gauge levels and throughput shall be maintained in a manner approved by the District and made available to the District personnel upon request.~~



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

STATIONARY SOURCE COMPLIANCE DIVISION

APPLICATION PROCESSING AND CALCULATIONS

Pages
16

Page
14

Appl. No.
513832

Date
11/17/10

Processed
By Rafik
Beshai

Checked
By

The operator shall install and maintain an automatic tank level gauge (ATLG) and recorder to continuously record the vertical movement of the roof. For the purpose of this condition, continuous recording is defined as once every 15 minutes.

The operator shall calculate the total one-way roof movement, in feet, on a monthly basis.

The ATLG installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLG differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLG shall be repaired and put back into service within 15 days. While the ATLG is being repaired, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to the discovery of the discrepancy.

In the event of a failure or routine maintenance of the ATLG, the ATLG shall be repaired (if necessary) and put back into service within 15 days of the time that the ATLG failed or was removed from service for maintenance. While the ATLG is being repaired or maintained, the throughput shall be determined by the hourly tank level data averaged from the previous 30 days prior to the time that the ATLG went out of service.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: D1150]

C6.1 The operator shall use this equipment in such a manner that the hydrocarbon concentration being monitored, as indicated below, does not exceed 30 percent of the Lower Explosive Limit.

The operator shall use an explosimeter to measure the Lower Explosive Limit (LEL) in the vapor space above the internal floating deck on a semiannual basis.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 1178, 4-7-2006; RULE 463, 5-6-2005]

[Devices subject to this condition: D1150]



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

STATIONARY SOURCE COMPLIANCE DIVISION

APPLICATION PROCESSING AND CALCULATIONS

Pages
16

Page
15

Appl. No.
513832

Date
11/17/10

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E71.16 The operator shall not use this equipment to store sour naphtha containing 50 ppm by volume (22 ppm by weight) or more H₂S, nor having a total true vapor pressure of 11 psia or greater under actual operating conditions. The operator shall, at least once a week, sample and test for H₂S concentration and vapor pressure of the storage materials using test methods specified in Rule 463 or alternative methods approved in writing by the District. Records of sampling, storage temperature, and test result shall be maintained for at least five years.

[**RULE 463, 5-6-2005; RULE 1401, 2-7-2003**]

[Devices subject to this condition : D1150]

E193.10 The operator shall construct, operate, and maintain this equipment according to the following specifications:

This tank shall be equipped with a fixed self-supporting roof with an internal floating deck ~~with no guide poles~~. All rim vents shall be closed with a weighted mechanical actuation cover. This tank shall be equipped with a rim seal system consisting of a primary seal and a secondary seal meeting the specifications listed in Rule 1178(d) (1)(B).

[**RULE 1303(a)(1)-BACT, 5-10-1996**]


[Devices subject to this condition : D1150]

H23.12 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
BENZENE	40CFR61, SUBPART	FF

[**40CFR 61 Subpart FF, 12-4-2003**]

[Devices subject to this condition : D1150]

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</p> <p>STATIONARY SOURCE COMPLIANCE DIVISION</p> <p>APPLICATION PROCESSING AND CALCULATIONS</p>	Pages 16	Page 16
	Appl. No. 513832	Date 11/17/10
	Processed By Rafik Beshai	Checked By

H23.25 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
HAPs	40CFR63, SUBPART	CC
VOC	District Rule	463
VOC	District Rule	1178
VOC	District Rule	1149
VOC	40CFR60, SUBPART	Kb

[RULE 1149, 5-2-2008; **RULE 1178, 4-7-2006; RULE 463, 5-6-2005; 40CFR 60 Subpart Kb, 10-15-2003; 40CFR 63 Subpart CC, 6-23-2003]**

[Devices subject to this condition : D1150]